Department of Energy
Washington, DC 20585

MAY 16 2012

MEMORANDUM FOR SIMONA ROLLI

FROM: GLEN CRAWFORD
DIRECTOR, RESEARCH AND TECHNOLOGY DIVISION
FOR HIGH ENERGY PHYSICS

SUBJECT: Laboratory Energy Frontier Research Review

The mission of the DOE High Energy Physics (HEP) program is to understand how our universe works at its most fundamental level, and the Proton Accelerator-based Physics subprogram supports that mission by fostering experimental research at the Energy Frontier that provides new insights into the basic constituents of matter and the forces between them, thereby advancing our strategic goals for science.

This letter is to request that you conduct a review of HEP-supported laboratory efforts in the area of Energy Frontier Research on July 30 - August 1, 2012, in Rockville, MD. The purpose of this review is to assess the quality of the recent scientific performance by these research groups, the merit and feasibility of their proposed research for achieving the scientific goals and milestones of the field, and the relevance of their research efforts to the overall HEP mission.

We are particularly interested in a review of the laboratories' research contributions (as applicable) along the following programmatic thrust lines:

- Tevatron (D0 and CDF)
- LHC (ATLAS and CMS)

For each individual laboratory research group, we request a specific evaluation of:

1. The quality and impact of the research by the group in the recent past;
2. The scientific significance, merit, and feasibility of the proposed research;
3. The competence and future promise of the group for carrying out the proposed research;
4. The adequacy of resources for carrying out the proposed research, and cost-effectiveness of the research investment;
5. The quality of the support and infrastructure provided by the laboratory; and
6. How well the group's activities relate to the overall HEP mission.

The final report should outline the laboratory-based HEP research program in each of these thrusts and discuss any unique and important elements that the laboratory programs bring to bear in addressing these research topics. In this context, we request a comparative assessment of each laboratory's overall performance in these areas relative to its peers, as well as an assessment of overall effectiveness and per capita impact when compared with university groups. In addition, for this review, we would appreciate a comparative evaluation of individual laboratory research staff working in this area that addresses the merit and potential impact of each individual's recent and proposed work; as well as the competency of the investigators and their likelihood of success. The overall and individual evaluations of the laboratory research groups will be an important input to the process of optimizing resource allocations within the various research thrusts.

The laboratories should provide relevant information in advance of the review which addresses these items and facilitates reviewer evaluations. Their proposed program should be described for a variety of funding scenarios that you provide to them.

I encourage you to interact with the laboratory groups at the review and provide them with whatever immediate feedback you find appropriate. Upon the completion of the review, reviewers should send a letter summarizing their findings and evaluations, which address both the overall assessment of laboratory contributions to the research thrusts noted above and the individual laboratory evaluations. The letters will be confidential within HEP. Individual laboratory evaluations will be summarized and conveyed to the laboratories. The overall assessment of laboratory contributions to the research thrusts will be incorporated into a summary report from HEP. I would like to receive the individual laboratory evaluations and the summary report no later than October 15, 2012.

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